

Focus on ICT in Calabria









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A. HISTORICAL BACKGROUND OF THE ICT VOCATION IN CALABRIA

The development of ICT in Calabria has been facilitated by the action of the University of Calabria that in 1979 became the promoter of the CRAI (Consortium for Research and Applications of Computing) and in 1984 participated in the foundation of the CUD (Distance Learning University Consortium). Both experiences, involved more than 300 people, including researchers, technicians and administrative personnel and ended in the mid-90s, leaving a significat impact in terms of professionalism and relationship networks in the area and for the University.

The CRAI, in particular, played a crucial role in the development of the ICT productive system in Calabria. The effects were more evident in terms of training: advanced, specializing, continuous. Moreover, many highly innovative research products were developed, one of which, the Distributed Query System (DQS), was exported to the United States.

In 1982 the Faculty of Engineering at the University of Reggio Calabria was estabilished and it started new lines of research in telecommunications and electronics. At the same time the Faculty of Medicine and Surgery began to operate at a branch in Catanzaro, which in 1998 would become an autonomous university, devoting constant attention to the systems of data processing in the biomedical field.

In the meantime, the experience of the CRAI came to an end. The diaspora of the excellent skills and professionalisms of those who worked at the Crai determined the spread of a humus facilitating the development of the regional ICT system made of academia, research centers and businesses.

B. THE ICT CLUSTER IN CALABRIA

The strength of the ICT cluster in Calabria is the presence of research groups among the best at the international level in the field of databases, knowledge management, data mining and process analysis as well as strongly interdisciplinary scientific and professional expertise on distributed systems and mobile computing (grid and cloud computing, computer networks, wireless networks and ad hoc networks, distributed intelligent systems).

The cluster is made of a fabric of ICT companies interested in reaching new markets and operating in multiple fields (business intelligence, enterprise resource planning, intelligent mining of information from the web, risk management, network design and services for centralized management of data, systems, artificial intelligence, etc). The ICT Cluster also involves several small companies and spin-off whose management



is strongly focused on innovative products and services.

In Calabria there are 2,128 active ICT companies (2014). Most of them are located in the province of Cosenza (39.3%), followed by the province of Reggio Calabria (24.3%) and Catanzaro (20.3%). Approximately 16% of the firms are in the provinces of Crotone and Vibo Valentia.

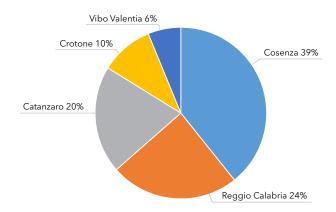


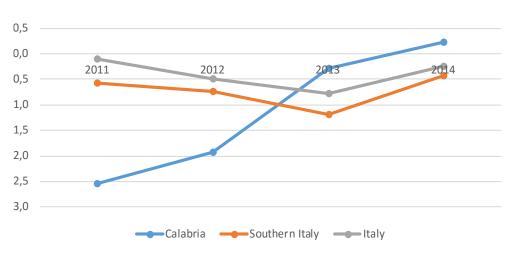
Chart n.1 - Geographic distribution of active ICT companies in Calabria (2014; %)

Source: Osservatorio ICT Calabria

The prevailing legal form of ICT companies in Calabria is the individual enterprise, followed by capital companies (29.5%) and partnerships (15.8%).

The trend of demographic rates of ICT companies in Calabria in 2014 represents the image of a sector that is gradually recovering its breath: the birth rate is 8%, higher than the national level (6.8%) and in line with the value recorded in Southern Italy (7.9%), while the mortality rate (7.8%) is substantially similar to the data collected in the whole country (7.1%). After eight years of decline, the ICT sector in Calabria is experiencing a positive turnover (0.2%).





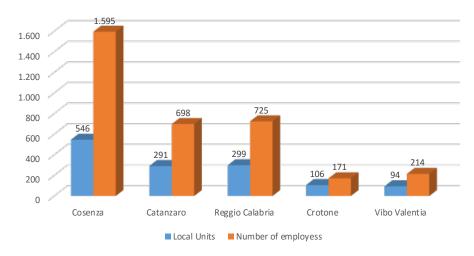


Source: Osservatorio ICT Calabria

In 2012 (last Census of Industry and Services), the ICT sector in Calabria is composed of 1,336 local units employing 3,403 employees. Cosenza is the main production centre with 40.9% of the facilities followed by Reggio Calabria (22.4%) and Catanzaro (21.8%).

The provincial distribution of employment shows the leadership of Cosenza with 1,595 employees in the ICT sector (46.9% of regional employment) followed by Reggio Calabria (21.3%) and Catanzaro (20.5%).





Source: Osservatorio ICT Calabria

C. THE ICT RESEARCH AND TECHNOLOGICAL INNOVATION SYSTEM IN CALABRIA

1. THE REGIONAL UNIVERSITY SYSTEM

In the ICT sector, the area can rely on an excellent availability of specialized skills, which constitute a key factor for the development of innovation and research activities. The regional university system, in particular, plays a pivot role in the selection of local innovation in ICT. Below, we present a brief overview of main actors, their different missions and structures.

THE UNIVERSITY OF CALABRIA

The University of Calabria (UNICAL), which was founded in 1972, has 14 departments, among which the Department of Informatics, Modeling, Electronics and System Engineering - DIMES - which has more than 60 units between professors and researchers.

The University of Calabria is among the best universities in the world in the area of Computer Science, which includes the field of information technology, telecommunications and operational research. According to the Academic Ranking of World Universities (ARWU) by Shanghai Jiao Tong University, in 2010 the University of Calabria ranked among the top 100 positions.

The University of Calabria supports and encourages the establishment and start-up of innovative knowledge-based enterprises through the implementation of initiatives aimed at stimulating and accompanying the development of ideas of enterprise and self-employment by young graduates, the promotion of spin-off companies from top research carried out within its own facilities and the provision of logistics and specialist services within Technest, the incubator of high-tech companies located in the "Polo Tecnologico".

The Liaison Office at the University of Calabria supports academic researchers in developing research projects, networking activities with companies and other research organizations, and in the exploitation of research results since 2003.

The University of Calabria, in collaboration with the regional universities, organizes a business idea competition known as the "Start Cup Calabria". The competition, which reached its eighth edition in 2016, take place every year from April to July and it selects the best innovative business ideas to be transformed into start-up of interest for the innovative finance.



Technest, the incubator of University of Calabria is a Service Centre established under the project called "Knowledge Research and Development to Start Advanced Technology Enterprises in Calabria". This project was funded by the Ministry of Economic Development with the aim of supporting the creation, start- up and development of new competitive companies with a high content of knowledge to contribute to the socio-economic development of the region.



Technest, with an area of 2,000 sqm, 20 equipped rooms, 8 administrative offices and 1 multimedia room, accommodates up to 20 hi-tech start-up companies and provide specialized services to support technological development, transfer of intellectual property rights and facilitate access to risk capital.

THE MEDITERRANEAN UNIVERSITY OF REGGIO CALABRIA

The Mediterranean University of Reggio Calabria is one of the four calabrian universities and the main university of Reggio Calabria. It is joined with the Mediterranean Universities Union (UNIMED), and it has undertaken over the years the development of international cooperation through the creation of stable and productive links in teaching and research fields, with a keen interest in the Mediterranean area. The Mediterranean University is also committed to higher educational training through master degrees, in cooperation with international partners, and through the innovatory contents of the courses, the excellent reputation of the teaching staff and the level of the invested funds.

The Mediterranean University of Reggio Calabria is composed of 6 departments. ICT research is manly concentrated into the Department of Information Engineering, Infrastructure and Sustainable Energy (DIIES). The Department DIIES promotes and coordinates research activities of each belonging researcher and the right of direct access to research funding. The Department promotes, coordinates and carries out research and consultancy contracts with public and private institutions and organizations also in conjunction with other departments. DIIES organizes bachelors and master courses in ICT engineering, beside PhD courses. The Department participates in educational activities related to graduate schools, organizes seminars, conferences and conventions of scientific nature, finding connections with similar structures in Italy and throughout the World and ensures the publication and the dissemination of the results achieved by its researchers.

At the DIIES operate 15 research laboratories: among them, the "Computer Engineering Lab" and the Laboratory for Advanced Research into Telecommunication Systems - ARTS, are the most related to software and network IT technologies.

The "Computer Engineering Lab" (in which operates the Security Trust and Social Network Group - STS) focuses its efforts on cutting-edge research

related to the context of Computer Security and Trust in distributed systems and Social Networks. The research activity of the group mainly falls in the field of Security, Privacy and Trust in Computer Science, with a strong attention towards social networks, about which even social network analysis and e-government studies are of interest of the group.

The research of ARTS Lab is primarily concerned with the field of protocols and applications for Advanced Systems of Telecommunications solutions for wireless telecommunications networks hybrid (satellite networks, mobile networks, wireless terrestrial networks), network-based pervasive communication systems of smart objects (sensors, actuators, RFID).

THE UNIVERSITY "MAGNA GRAECIA" OF CATANZARO

The University "Magna Graecia" of Catanzaro has 4 Departments, including the Department of Medical and Surgical Sciences where a group of professors and researchers carries out research on information processing systems with particular application to the field of biomedicine.

The School of Medicine and Surgery includes the Laurea Degree on Informatics and Biomedical Engineering, the Master of Science Degree on Biomedical Engineering, and several PhD Programs.

The Department of Medical and Surgical Sciences includes the Bioinformatics Laboratory that makes research on parallel and distributed computing, bioinformatics, medical and health informatics, and databases. Among the others, the Bioinformatics and Computer Engineering group developed the following competences:

- Design and development of parallel bioinformatics algorithms and software platforms for the preprocessing and mining of genomics (gene expression and SNP microarray), proteomics (mass spectrometry) and interactomics data. Algorithms are based on the use of biological ontologies, web services and workflows.
- 2. Design and development of bioinformatics algorithms for the discovery of protein complexes and the alignment of protein interaction networks, based on the use of Gene Ontology annotations and semantic similarity measures. Design and development of bioinformatics algorithms for the annotation, querying and visualization of protein interaction networks and pathways.
- 3. Design and development of information systems and applications for the management and analysis of medical and clinical data to support diagnosis and therapy, including the analysis of Magnetic Resonance Images (structural MRI and DTI) in neurosciences, voice signals for early detection of vocal tract diseases, the semi-automated positioning of stents in cardiology, the spatial analysis of epidemiology data, the knowledge extraction from Electronic Patient Records.



THE RESEARCH CENTER ICAR/CNR

The Institute of Computing and High Performance Networks (ICAR) is an Institute of the National Research Council (CNR), whose objectives are research of innovative solutions, technology transfer and higher education in the area of high performance computing (computing and knowledge grids, parallel and distributed computing systems, advanced technologies for the Internet) and intelligent and complex systems (management of large stores and data flows, representation and knowledge discovery, perception robotics, intelligent multi-agent systems, multimedia systems, scientific computing).

ICAR is focused on two main areas: (i) management of large data streams, extraction and representation of knowledge and innovative applications for business and process intelligence, and (ii) intelligent services for computational grids and peer-to-peer systems and distributed logistic applications.



ICT-SUD

ICT-SUD was created in the framework of a national programme (PON Ricerca 2000-2006) aimed at promoting "Technology Competence Centres" in Southern Italy. In this context, in December 2016, ICT-SUD Competence Centre was founded as a network of universities, research centers, SMEs and large enterprises. It is divided into regional nodes with a major node in Calabria at the University of Calabria, and 4 nodes in Campania, Apulia, Sardinia and Sicily.

The ICT -SUD mission is to perform as an innovation intermediary in the ICT sector, strengthening links between the scientific and the business system, supporting cooperation between businesses and responding to local demand for innovative services and technology transfer.

The strategic objective of the ICT-SUD is to support the technological innovation by the demand as well as the supply side. On the demand side, ICT-SUD facilitates access to research by the production system as well as improves the competitiveness of local organizations reducing barriers caused by geographical location. On the supply side, it supports the increased competitiveness of ICT goods and services it produces.

The shareholders of ICT-SUD are currently 65, including 5 universities (University of Calabria, Mediterranean University of Reggio Calabria, University Magna Graecia of Catanzaro, University of Messina, University



of Basilicata), the CNR (National Research Council), the CINI (National Inter-University Consortium for ICT), the CNIT (National Inter-university Consortium for Telecommunications), the CeRICT (which includes all the universities of the Campania Region), the Regional Centre of competence of Puglia DAISY-NET (which includes all the Apulian universities and various companies of the region), the regional competence Centre ICT of Sardinia (which groups the Sardinian universities and various regional companies), the SIRIO Consortium in Sicily (composed by the University of Palermo and Engineering SpA), 4 more public /public-private shareholders and 48 companies in the ICT sector. The share of public investment is about 53.56%.

Among the main research and innovation projects realized by ICT-SUD:

Investment Contract

Within the project named "Investment Contract" (IC), co-financed by Calabria Region, ICT-SUD designed and tested a digital ecosystems for organizations involved in software development. The IC is divided into two parts: (i) an Innovation Plan, which in turn includes a feasibility study and five research and development projects, and (ii) a Training Plan, which consists of a number of specialist courses on innovative ICT technologies and platforms addressed to personnel of industrial partners. The five research projects are briefly illustrated below:

◊ Integrated logistics system for transportation services in urban areas

The project aims at building a platform for the management of urban mobility of people and goods providing a new organization of the transportation systems which integrates newest technologies in order to increase the movement of goods and/or people and, at the same time, significantly reducing the vehicles in circulation, leading to benefits in terms of road safety (accidents), environmental impact (CO2 emissions, noise, etc.) and energy saving (fuel consumption).

\diamond Access control systems based on RFID and biometric technologies

The project aims at building an innovative platform that extends traditional presence management and detection systems. The authentication will be based on biometric data stored on RFID support.

◇ Health Knowledge Mining Suite

The project aims at creating a suite of solutions for analysis, management, monitoring and optimization of health expenditure. The project makes use of data mining techniques to allow the monitoring of the behaviour of doctors / pharmacies over drugs manufactured by a given pharmaceutical company.

◇ Integration for Business Intelligence

The project aims at creating a platform for the integration of data and services. Such a platform includes: techniques for intensional and extensional data quality, methods for data cleaning through



communication workflow with operational systems, methodologies and techniques for the design of dashboards, technological solutions for integrating dash-boarding systeùms.

♦ Digital Ecosystems and Virtual Organizations

This project, that plays a central role within the Innovation Plan is indeed devoted to the design and implementation of an innovative digital ecosystem for complex business organizations involved in software development as a mean to provide methodologies and tools to its member companies for the sharing and integration of knowledge and expertise.

TETRIS

Within the National Programme for "Research and Competitiveness", has been developed the TETRIS (TETRA Innovative Open Source Services) Project, which aimed to extend the technologies of TETRA telecommunication protocol and develop innovative services based on it. In particular, TETRIS is concerned with enabling innovative services for Smart City by means of technological tools and intelligent platforms for collecting, representing, managing and exploiting data and information gathered from sensors and devices deployed in the territory.

LOG.IN

As part of the National Program "Made in Italy" within the "Industry 2015" Initiative by the Ministry of Economic Development, the project "Integrated Logistics LOG.IN" has been coordinated by one of the ICT-SUD members (Daisy-Net). The project aims to develop a system that intervenes in specific industrial processes of different sectors (including agro-food), harmonizing the processes of the individual production units from the acquisition of raw materials, the handling of the product until the delivery to the customer.

INMOTO (Information And Mobility For Tourism)

INMOTO, a project funded within the National Program for "Research and Competitiveness", aims to define and develop an integrated system of new services and applications for the creation, certification, organization, monitoring and promotion of tourism and a real-time platform to support Travel Mobility.

SMART FARM

The "Smart Farm" project was funded by the Region of Sicily under the Rural Development Programme. For its implementation, an Association of companies was set up, coordinated by V.SERVICE Ltd. and participated by the Sicily Node of ICT-SUD. Objective of the project was the introduction of innovative information and communication technologies in agro-food companies.



Regional Strategic Agenda

As part of the Regional Programme for "Research and Innovation", ICT-SUD has participated in seven Regional Strategic Research Projects in the ICT sector. In particular, ICT-SUD has carried out contract research activities on the following areas:

- Smart Company and Cooperation: including three projects: "Social commerce", "Cross Channel Commerce" and "EasyCatalogue";
- ♦ Smart Territory, including two projects "Sinse" and "Simum";
- ♦ Knowledge Management, including the project "THT Talent Hunter Technology";
- ◇ Innovative Services for Public Administration, including the project "Divo".

Technological District of Cyber Security

ICT.SUD is a founding partner of the Cyber Security Technology District of, located in the area of Cosenza and described below.

◆ Regional Innovation POLE in the ICT sector

ICT.SUD is the subject of the Regional Innovation Pole "ICT-Calabria". This important initiative is described below.

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THE INNOVATION POLE "ICT-CALABRIA"

The "ICT Calabria" Innovation Pole was established in 2011, as a link between companies, universities and research centres, with the main objective to stimulate innovative activities by promoting intensive interactions, sharing facilities and exchanging knowledge and expertise, contributing effectively to technology transfer, networking and information dissemination among the companies that make up the Pole.

The Pole is part of the "Regional Network of Innovation Poles", a strategic integrated project funded by POR Calabria with ERDF 2007-2013.

The University of Calabria, the Mediterranean University of Reggio Calabria, ICAR CNR, 2 public-private consortia and a costantly increasing number of companies - nowadays more than 30 -, mainly of the ICT sector, are associated to the Pole that is managed by the ICT-SUD Competence Centre.

The ICT Pole has developed some basic innovation services, such as: sharing research infrastructure; networking and strategic marketing; exploitation of research results; observatory on ICT market and trends; etc. The Pole has also started a number of research projects involving both



academic and industrial partners, with the main role of coordinating the participation of SME members thus enabling a wide technological transfer towards small companies which otherwise, as isolated entities, could have some difficulties to get at the edge of technological innovation.



THE "CYBER SECURITY" TECHNOLOGIC DISTRICT

The Cyber Security Technological District was set up within the PON 2007-2013 program initiatives of the Ministry of Education, University and Research (MIUR) to launch High Technology Districts and Laboratories. The goal of the District is to create a territorial platform localized in Calabria, in the area of Cosenza, specialized in the field of Cyber Security, with a broad perspective of technological growth and market. The District focuses on three main areas:

- Protection of end-user interactions;
- Protection of digital services and payment systems;
- Security-preserving dematerialization.

The District is operated by three research organizations (Department of Informatics, Modeling, Electronics and System Engineering - DIMES - University of Calabria, Department of Information Engineering, Infrastructure and Sustainable Energy - DIIIES - University Mediterranea of Reggio Calabria, the Institute of High Performance Computing and Networking - ICAR - CNR), two large enterprises (Poste Italiane, NTT DATA Italy) and two SMEs (ICT-SUD, Nova System Roma). In addition ICT-SUD coordinates the participation of a number of additional SME that are partners of the consortium.

THE SI-LAB PROJECT

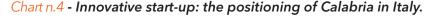
The SI-Lab project is a distributed laboratory for digital service innovation, promoted by ICT-SUD as an initiative within the abovementioned PON program, which consists of three nodes located in Sicily, Calabria and Apulia and involves both academic and industrial partners in each node.

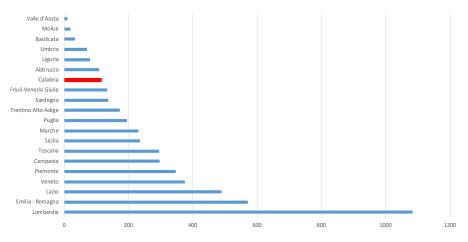
The laboratory is aimed at activating virtuous mechanisms of interaction between the public and private sectors to set up novel skills and operational tools to support digital user-driven service innovation in a national and international context. The mission is to create a network of excellence, expertise, tools and services to be used by companies to innovate production and service delivery processes exploiting the opportunities of Future Internet. A consortium of the three regional universities, the CNR and the regional branches of important ICT industrial companies manages the node in Calabria.

D. THE BUSINESS SYSTEM

1. INNOVATIVE START-UP AND THE POSITIONING OF THE REGION IN THE ITALIAN CONTEXT

According to a public survey conducted in 2015, in Italy there are more then 5000 start-up, out of which 115 located in the Calabria Region.

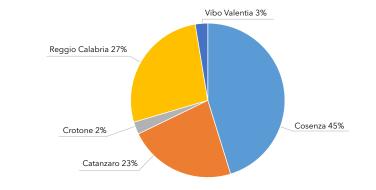




Source: Osservatorio ICT Calabria

Most of the 115 start up of the Region, are concentrated in the Cosenza area, where are also located the University, the CNR, the Cybersecurity technologic district as well as the SI- Lab, which involve large enterprises such as Engineering, Poste Italiane and NTT DATA.

Chart n.5 - Distribution of start up in Calabria by province (2015; %)





Source: Osservatorio ICT Calabria

2. START-UP, ACADEMIC SPIN-OFF AND SMES ASSOCIATED WITH THE ICT-SUD COMPETENCE CENTER AND/OR THE ICT POLE

3D RESEARCH

Business Sector: Digital Heritage, Virtual Museum, Computer Graphics

3D Research develops systems and 3D interactive applications for industrial design, virtual museums and cultural heritage exploitation, taking advantage from innovative technologies such as 3D scanners, virtual and augmented reality and 3D Web.

website: www.3dresearch.it

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ALTILIA

Business Sector: ICT (Big Data Analytics - Machine Intelligence)

Altilia turns Big Data into Smart Data by "MANTRA Smart Data Platform®". Altilia allows companies to make sense of enterprise and web semi/ un/structured Big Data to get faster and deeper insights, better drive business processes and to make more informed decisions.

MANTRA Smart Data Platform[®] transforms big data flow into relevant, richer, and usable Smart Data by a workflow-based semantic easy-touse approach. So, you don't need data scientists, information architects, ontologists, taxonomists or machine-learning experts to build accurate, flexible, agile, and scalable Smart Data Solutions.

MANTRA copes with Big Data variety and complexity enabling to 'harmonize' and transform Big Data into actionable information faster and better. MANTRA is a hybrid-cloud platform obtained as unique blend of NLP, machine learning, artificial intelligence, and knowledge representation approaches implemented on top of Spark and the full Hadoop Cloud stack.

Founded in 2010 as spin-off of ICAR-CNR, ALTILIA raised € 2,6M in a "series A" funding from Principia SGR in 2012/2013; in April 2013 it was ranked as one of the eight most Innovative Data Management Companies & Solutions at Enterprise Data World in San Diego (USA, CA); in July 2016 it was listed in the "100 Most Promising Big Data Solution Providers" by the magazine CIOReview.

ALTILIA is currently headquartered in Rende (CS, Italy), with a subsidiary in Milan, and a team of 20 high-skilled employees. ALTILIA's market is composed by big and medium enterprises belonging to all industries.



The company has many customers in USA and Italy operating in different industries and business application areas such as: Price/Product/Competitive Intelligence, Smart Data and Content Intelligence, Customer Intelligence.

- website: www.altiliagroup.com
- ▶ e-mail: info@altiliagroup.com

APPLICON

Business Sector: ICT (Embedded Systems for Underwater Communication and Localization)

APPLICON deals with hardware/software design and implementation of embedded systems for communication, localization and navigation of underwater vehicles, sensors and divers. APPLICON turnkey solutions hinge upon research collaborations with the Autonomous Systems Lab of the University of Calabria. APPLICON developed SEAMODEM, the first totally made in Italy acoustic modem for underwater communication, which is now on the market. APPLICON is actually working at new solutions for increasing the safety of divers and their localization.

▶ website: www.applicon.it

▶ e-mail: info@applicon.it

ARTÉMAT

Business sector: ICT (Training, Recruiting, Employer Branding)

Artémat is a young Italian company, which is the result of a happy combination of computer science and management engineers. The name itself explains what Artémat does: "Art" for creativity, "Mat" for the rational part, because of the mathematical models behind the games.

Artémat designs and develops business simulation tools focused on the Gamification. Artémat integrates the proprietary platform Business Game Studio into the training, recruitment and employer branding activities to increase the level of learning and engagement.



The main Artémat' tools are the Business Games: they are innovative simulation tools that allow to reproduce the dynamics and logics of a specific scenario. The participants, grouped in teams, have to lead a virtual company in a competitive market, with the aim to increase the company value. Currently, Artémat is focusing its activities on the augmented reality: "Beatrice" is the last developed tool. It is a "Mobile tourist guide" system (mobile application), based on Semantic Web technologies and Augmented Reality, that implements a complex indoor/outdoor geolocalization system and enables its administrators to manage and share semantic points of interest (POI), defined in a specific area (map). Semantic POIs describe geographic (indoor/outdoor) places with explicit semantic properties defined on a specific ontology.



website: www.artemat.it
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BIOTECNOMED - CALABRIA LIFE SCIENCES

Business Sector: Biotech, Life Sciences, MedTech

Biotecnomed is a LL consortium of public research institutions and small, medium and big enterprises. Founded in 2011, it manages the Innovation Pole of Health Technologies, established with funds from POR FESR Calabria 2007-2013 and from the "Human Health and Biotechnologies" High Technology District, financed by the National Operational Programme on "Research and Competitivity" 2007-2013.

With 19 laboratories and 48 associated enterprises, Biotecnomed is a highly specialized organization in the fields of Biotechnology and Human Health, providing advanced services and facilities for research centers and enterprises.

Biotecnomed is a research and innovation organization, capable of attracting enterprises and startup companies, as well as public and private investments in South Italy.

Biotecnomed provides ideas, tools and resources fostering innovation growth and development, creating new business opportunities, enhancing collaboration between companies, universities and regional research centers.

website: www.biotecnomed.it

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CALBATT

Business Sector: Clean Tech (Energy Storage)

CalBatt develops fully customizable solutions based on the dynamical analysis and efficiency optimization of energy storage systems, for both stationary and e-mobility applications. Experimental tests carried out together with ENEL's Engineering and Research Division by using commercial batteries have demonstrated that CalBatt technology can allow an energy efficiency increase of up to 15% with respect to state-of-art storage management systems. The product is currently in the demonstration stage in the operational environment to potential customers of the storage segment that have already shown their interest.

CalBatt innovative technology has won an award at the Techgarage -StartCup Calabria in 2011, and at the Enel Lab competition in 2013 by ENEL that funded the first development stage of Calbatt. Founded in 2012 as a spin- off of the University of Calabria, the company achieved the status of "innovative start-up" since 2013 and is registered in the dedicated section of the Italian Business Register.

▶ website: www.calbatt.com

▶ e-mail: cappuccino@calbatt.com

CALCTEC - CALABRIA LIQUID CRYSTAL TECHNOLOGY

Business Sector: Electro-Optics, Electronics, Mechanics

CaLCTec provides services related to basic and applied research in the field of materials with emphasis on the LCD. CaLCTec produces electro-optical devices and scientific instruments: spin-coater, hotstage, temperature controls, dip coater, dispenser. Devices with a high degree of development. It provides services in the field of technology of liquid crystals and thin films, conformation of ITO electrodes, surface treatments for the alignment of liquid crystals, empty cells for measurements of optical and electro-optical, development of control systems based on microcontroller. The products and services are for academic and private research laboratories.

- ▶ website: www.calctec.com
- ▶ e-mail: info@calctec.com



CHT - CALABRIAN HIGH TECH

Business Sector: Medical Devices, Robotics and Automation

CHT offers its expertise in the field of ideation, patent preparation, deposit, prototype design and construction of new high tech products in the sectors of medical devices, robotics, both medical and industrial, and even the ideation and realization of ex novo automatic plants using innovative solutions in the sectors of mechanics, electronics and software development, integrating various technologies and employing unconventional engineering methodologies and practices for itself and third parties.

- website: www.chtsrl.com
- e-mail: chtsrl@virgilio.it

DIARCO RESTAURO

Business Sector: Conservation and Restoration of Cultural Heritage

Diarco Restauro S.r.l. provides the following services in the field of conservation and restoration of cultural heritage: diagnosis of the materials in paints, frescos, historical furnitures, etc.; certifications of cultural heritage artefacts, with respect to their datation and author attribution; disinfestation of cultural heritage artefacts from biological infestants such as insects, fungus, bacteria, moulds, etc; restoration of paints, books, frescos, historical furnitures.

• website: www.diarcorestauro.com

▶ e-mail: diarcorestauro@pec.it | info@diracorestauro.com

DLVSYSTEM

Business Sector: ICT (Knowledge Management, Knowledge Representation and Reasoning, Knowledge Extraction, Data Integration, Data Cleaning, e-Tourism, etc.)

DLVSYSTEM s.r.l. (est. 2005) is a spin-off company of the University of Calabria. The company mainly focuses on the research and development of the DLV system, with the purpose of licensing the core system as well as a comprehensive suite of DLV-based solutions aimed at knowledge intensive applications. Indeed, other than being packaged as a standalone solution, the DLV system constitutes the technological basis for providing (or integrating into a) larger solution



to enable organizations solving knowledge-based business problems. Moreover, DLVSYSTEM s.r.l provides consultancy and support for its use in an industrial context. Indeed, based on real-world experience, the company offers a comprehensive approach to intelligence gathering and knowledge management for partners in industry and companies to exploit business information for competitive advantage.

• website: www.dlvsystem.com

• e-mail: info@dlvsystem.com

DTOK LAB

Business Sector: ICT - Big Data & Cloud

DtoK Lab is an academic spin-off of the University of Calabria committed to deliver scalable solutions for Big Data analysis in business domains using Cloud technologies. DtoK Lab's customers are enterprises, business analysts, institutions that need to efficiently analyze the huge amount of data collected every day in their data centers or public Clouds. The company develops Nubytics, a Software-as-a-Service (SaaS) system that allows users to import their data to the Cloud, extract knowledge models using high performance data mining services, and exploit the inferred knowledge to predict new data and behaviours. DtoK Lab also provides consulting and implements high-performance data analysis in emerging areas such as social media, trajectory mining, sentiment analysis and data journalism.

▶ website: www.dtoklab.com | www.nubytics.com

e-mail: info@dtoklab.com

EASYANALYSIS

Business sector: ICT - Data Anlytics and Bioinformatics

EASYANALYSIS is a young start-up, founded in 2010 by some professors of the University of Catanzaro.

The mission of EASYANALYSIS is to carry out research, software development, consulting and provision of services in the field of information and communication technologies applied to biology, medicine, biomedical engineering, clinical engineering, advanced web systems, mobile systems and Cloud.

The expertise of EASYANALYSIS is bioinformatics, medical informatics, statistical analysis and data mining applied to biomedical and health



data, to support research and development various fields, including medicine and biology.

- website: www.easyanalysis.it
- ▶ e-mail: info@easyanalysis.it



ECO4CLOUD

Business Sector: ICT (Energy Efficiency & Data Center Optimization)

Eco4Cloud improves the operational efficiency of data centers, by significantly reducing energy consumption and delivering improved performance metrics thanks to a novel and self-organizing solution. Its technology is based on advanced research developed by its founders at the ICAR-CNR Institute, and has been extensively validated in industry, among others by Telecom Italia, Cisco, HP, IBM, Microsoft.The company is VC funded (by PrincipiaSGR, Digital Investments Sca Sicar), received positive analyst coverage (e.g. by 451 Research) and several innovation awards, such the 2014 Good Energy Award, the 2013 Bully Award, the 2012 UP Cloud Computing Award, the 2011 Working Capital.

- ▶ website: www.eco4cloud.com
- ▶ e-mail: info@eco4cloud.com

E WAY ENTERPRISE BUSINESS SOLUTIONS

Business Sector: ICT (System Integration, Enterprise Applications, Custom Development)

The company has been established in 2001 in Cosenza with the objective to become one of the most innovative reality of local context. It operates as a software factory for a large industrial group and it offers its services to both private customers and public administration.

The mission of the company is to build innovative solutions, by analysing the problems of customers and transforming them in solutions thanks to new technologies.

E way has developed various products including: eIMES 3D, a software that supports the medical oncology team, providing testing services of case studies and diagnostic imaging; Phoenix - a software platform for the management of tax revenues for the Public Administration; eCaf - a cloud platform for the CAFs.

The company employs 14 highly skilled people as well as some consultants, and is structured in three different Business Unit: information Technology - Analysis, design, development, installation, maintenance of

information systems; R&D - Research and Development; Education - Design and delivery of education services. The company is certified according to ISO 9001:2008.

- website: www.eway-solutions.it
- ▶ e-mail: info@eway-solutions.it

EXEURA

Business Sector: ICT (Business Analytics)

Exeura Ltd. is a 14-years old spin-off from the University of Calabria headquartered in Cosenza (Calabria, Italy). Its main interests are in the areas of Business Analytics and Knowledge Management. Exeura's mission is to build innovative solutions enabling to filter large amounts of data and to extract meaningful answers for decisions makers. Exeura is member of the Italian National Register of Research Laboratories (Ministry of University and Research) and also appears in the list of organizations and experts approved by the French Ministry of Research.

Exeura is founded on a business model where research, software development and market interact tightly with each other in a constructive dialogue. In this model, the role of the Sales & Marketing function is two-fold: (a) catching market signals and forwarding them to both the Research Operation Unit (ROU) and the Solutions Operation Unit (SOU), and (b) bringing to the market research prototypes, products and solutions coming from both ROU and SOU. Exeura has developed the Business Analytics platform Rialto, in order to build most of its solutions on solid foundations.

BA solutions are concerned with different vertical markets, such as Banks and Finance, Energy&Utilities, Telco&Media, Automotive, Healthcare. Recently, the company is moving towards prognostics solutions, analysing huge amounts of data gathered from sensors in order to enable predictive maintenance. Also, the current Business Analytics platform is being extended into a full-fledged Big Data Analytics Platform. Exeura employs 30 highly specialized professionals.

- ▶ website: www.exeura.eu, www.quablo.eu
- ▶ e-mail: info@exeura.eu



EXTRA

Business sector: ICT (System Integration, Enterprise Applications, Custom Development, Open Source Technologies)

Extra is a system integrator specialized in the design and development of web-based enterprise class applications, Open Source and cloud-based platforms and the best-of-breed IT technologies. The characteristics that distinguish Extra are: research of innovative solutions, Open Source and Cloud technologies; use of avant-garde development methodologies, agile and lean methods; partnership with some of the most important global technological players; investments in human capital, training, work environment and the blend of youthful creativity and experienced management. For these reasons, today Extra is considered a leading company in Italy and abroad in the Open Source, Cloud and all the field related to innovation, and to date it supplies professional services in all EMEA area to multinational organizations.

website: www.extrasrl.it

• e-mail: info@extrasys.it

GIPSTECH

Business Sector: ICT (Mobile, Localization Systems)

GiPStech has developed, and is bringing to market, an innovative indoor localization technology (like GPS but inside buildings where GPS does not work) based on the exploitation of the geomagnetic signal as guiding signal along with other technologies.

The core technology fuses input from inertial sensors common on all smartphones to derive localization precise to the meter without infrastructure. The technology is also applicable to custom devices for non-smartphone use cases, and fused with Wi-Fi and Bluetooth technologies.

GiPStech indoor localization technology can be declined in numerous vertical applications for many industries. In every setting where is useful to trace movements of persons or objects with a precision of 1 meter. To date, we have encountered actual interest - and are in fact in talks with relevant international firms - in some sectors: retail (including via telco companies), museums/fairs/public buildings, healthcare, defense, IoT, logistics, industry 4.0.

The technology is among the few in the world to offer indoor localization that is infrastructure free (nothing to install and maintain) and accurate to the meter. GiPStech is the only company in the world that offer indoor



localization off-line: the smartphone or other device can locate even without data connectivity. In addition, the technology is applicable to any hardware that is moved together with people (such as handheld devices, forklifts, etc.) or with objects. The algorithm can easily fit in limited computational power. Creating "dongles" or similar devices to be attached to persons or objects is possible. With such devices, the owner will be able to track position of persons or object within an enclosed space.

▶ website: www.gipstech.com

e-mail: info@gipstech.com

HERZUM

Business sector: ICT (Consultancy - Agile Methodologies - DevOps)

Herzum is an international consulting company, leader in Agile and DevOps and one of the largest Atlassian providers in the world. The group was created in March 2000 in Chicago, and has offices in Italy, India, and UK - and is busy expanding its geographical presence in 2016. Herzum is one of the few Atlassian Platinum Experts, a leading reseller of Atlassian products, and is well-known for its comprehensive Atlassian services. Herzum provides state-of-the-art Agile and DevOps services, advanced enterprise-level consulting, as well as custom application development to companies around the world. Herzum handles projects and organizations from the startup phase to the Fortune 100 level.

Its consultants are experienced professionals, with significant experience in large and small adoption of agile methodologies, a unique understanding of both modern and legacy technologies, and a passion for automation of all aspects of IT and software development. The company has helped align business with IT, reduce IT costs, and resolve architectural, project, or technology challenges.

The company was created by Peter Herzum, based on the success of his book "Business Component Factory", which was named the "bible of software factories", translated to several languages and adopted by large organizations and universities around the world. Herzum's pragmatic approach in solving challenges, together with the architectural perspective required to address long term objectives, allows the company to provide solutions to the most complex and pressing business issues.



website: www.herzum.com
e-mail: info@herzum.com

IDELIVERY

Business Sector: Nanotechnologies

iDelivery is an innovative company operating in the field of nanotechnology for pharmaceutical, cosmetic and nutraceutical applications. The company activities and service revolve on the following main areas: advanced nanotech analysis; consultancy services; new product development (i.e. new formulations), nanotech product line upgrading, nano carrier delivery systems development; innovative products launch & technology transfer. The company collaborates at different title with various Stakeholders (Universities, Research Centres, etc.) for the development, licensing and launch of innovative nanotech systems.

The mission of the company is to accelerate the up taking of nanotechnologies in the pharmaceutical, cosmetic and nutraceutical fields enhancing product efficiency and efficacy through the development of innovative tailored nano- systems that intelligently enable the delivery of adding value to both final customers and industrial players.

iDELIVERY's vision is to create a healthier world where all the products related to care & well-being are "free to express" their full and true potential without caring about any "barrier", achieving efficiently a long lasting and cost effective effects.

The company team is able to: formulate and realize nanocarriers for biomedical, nutraceutical and cosmetic application; develop new formulations and engineer new products in the reference sectors; test the efficacy of different active ingredients using in vitro and in vivo tests; assist the buyers in the patenting new products in this field; provide advanced and personalized coueses in the field of nano technology.

- website: www.idelivery.it
- ▶ e-mail: info@idelivery.it

ID TECHNOLOGY

Business Sector: ICT (E-voting Systems)

Since 1994 ID Technology has achieved excellent results that the market and the satisfaction of customers recognized over time. ID Technology is the business partner that meets the companies' requirements with innovation and high professionalism.

ID Technology is the e-voting and decision making services provider for the most important public and private companies, as well for document and content management solutions.



The Research Technology Lab was founded in 2000 and it is member of Italian National Register of Research Laboratories (Ministry of University and Research).

Since 2005 ID Technology has developed ELIGO, quality service for the e-voting management. The platform provides a secure web voting services for associations, organizations, federations, trade unions and companies to run voting events, from nomination to certification.

ELIGO uses encryption systems that guarantees high security levels and prevents the double vote and the possibility to modify the stored data. The voting platform ELIGO is SaSS developed, for a complete autonomy use and it can be customized for any kind voting event.

• website: www.idtech.it | www.eligo.social

▶ e-mail: contact@idtech.it

IES CONSULTING

Business Sector: SPACE (Remote Sensing for Environment)

IES Consulting srl is specialized in tecnological research and development for territorial intelligence and management of resources, based on spaceborne and airborne remote-sensing. The applications developed range from the mapping of terrestrial features for planning, risk definition, prevention, and damage assessment, to the automated monitoring - from real time to delay time - of changes in relevant earth parameters, either by passive (electro-optical multi-spectral radiometers at various resolutions) or by active remote sensing (synthetic aperture radar). The earth features dealt with are: detection and monitoring of fire and volcanic hot-spots, classification and change detection in vegetation burn scars, forecast of post-fire soil erosion, fast detection and mapping of asbestos covers, thematic mapping of urban areas, infrastructures and terrestrial communication networks.

website: www.iesconsulting.net
e-mail: ies@iesconsulting.net



Business Sector: ICT (Transport and Logistics)

The main field of ITACA's activity is the design and development of decision support systems, expert systems and ICT e-solutions for the management, optimization and control of logistics, transportation and urban mobility systems. ITACA solutions are based on operational research, simulation/optimization state of the art models and methods and aim at constructing ICT HW/SW web based integrated platforms that have the goal of supporting the realization of environmental and economic sustainable, safe and secure, effective and efficient systems.

ITACA offers Ride2Go!, an integrated platform aimed at managing a plethora of demand responsive transport systems, i.e. bus on demand, disabled transport, school bus. Its core is composed by an optimization engine which minimizes the costs related to the fleet while maximizing the service levels. A number of parameters and settings makes this software highly customizable and suitable for different scenarios.

ITACA offers Shift2Go! as well. This is an optimization engine aimed at planning vehicles and crews shifts for public transport companies. It can be customized with constraints and cost parameters in order to fit real scenarios.

• website: www.itacatech.it

• e-mail: info@itacatech.it

I-TENERE

Business Sector: Green Building

I-TENERE is an innovative startup that plans to revolutionize the world of green buildings. The aim is to be the main contact for spreading an eco-friendly culture of building, while keeping down the cost of green building and limiting the intermediaries between the designer, manufacturer seller and final customer.

I-TENERE offers product diversification (offering different styles of bungalows) alongside a variety of engineering and architectural services in the green buildings sector, followed after the first year by a marketing plan targeting countries interested in sharing the company experience. On a country-by-country basis, it is possibile to assess whether to set up franchising or other types of operations; in the Netherlands, for example, the company could establish an operating center, whilst franchising could be a good solution for South Africa.

Finally a company will have the opportunity to grow by investing in franchising. In addition to the company, anyone in the world can have



a green building customized product, either manufactured in Italy or built in partnership with a local company that uses local products. These products will be tested in I-TENERE-run research and development laboratories, in order to ensure proper the ecosustainable product certification. Any company interested in affiliation will receive support from I-TENERE for the use of local products and their employment in green building. In addition to providing advice, I-TENERE will also provide materials that cannot be found locally.

Compared to other competitors, I-TENERE aims to spread a CIRCULAR ECONOMY culture, protecting the activities with patents before and after licenses. Beyond that, I-TENERE announces that its products and services are truly and 100% environment-friendly, and contribute to decreasing C02 production. The business focus is on everything green, including the word itself.

website: www.i-tenere.com

▶ e-mail: i.tenere2014@gmail.com

ITHEA

Business sector: Business Intelligence and Business Process Management Platforms

ITHEA is a software company funded in 2008 as a spin off of the University of Calabria, with the aim of providing software solutions (such as ERP, CRM, B2B, B2C, ECM and BPM) to Italian and European customers. Also, ITHEA has been using research results and academic experiences to develop new solutions aiming to both improve existing ICT technology as well as industrializing research results (as for instance in biomedicine and health informatics for portable and reliable health care solutions in disease prevention).

It has many customers in service companies and many SME made in Italy brands use ITHEA software management solutions.

Among the others, ITHEA offers Polinice+, a platform for e-business for the made in Italy industry with specific functionality such as the product configurator (engineering, technical details with sector variations), mass customization (b2c advanced, tailored, committed to row order), retail innovation (data mining and business intelligence), supply chain (integration with suppliers and reducing costs of production) and interoperability (ease of integration with third party systems).



website: www.ithea.ite-mail: info@ithea.it

MACROFARM

Business Sector: Cosmetic and Nutraceutical

The research activity carried out by Macrofarm has allowed the development of an advanced technology about the synthesis of functional polymers by covalent insertion of active molecules (antinflammatory, antioxidant, antimicrobial and photo protective compounds) on polymer chain. All this by employing eco-friendly processes that do not use any organic solvent or toxic chemical reagent. Macrofarm offers a wide range of services to companies, performing chemical and biological analyses on raw materials and finished products.

- website : www.macrofarmsrl.com
- e-mail: info@macrofarmsrl.com

NTT DATA

Business sector: ICT (Enterpise Application, Cyber Security, Facility Engineering Services, Telephony)

NTT DATA partners with clients to navigate and simplify the modern complexities of business and technology, delivering the insights, solutions and outcomes that matter most. NTT DATA delivers tangible business results by combining deep industry expertise with applied innovations in digital, cloud and automation across a comprehensive portfolio of consulting, application, infrastructure and business process outsourcing services. NTT DATA is a top 10 global business and IT services provider with 100,000+ professionals in more than 50 countries, and is part of NTT Group, a partner to 85 percent of the Fortune 100.

• website: www.nttdata.com

OMNIA ENERGIA

Business sector: Trading on the free market of electricity and gas, ICT solution for energy efficiency, energy-efficient buildings

Omnia Energia Group has been working for more than 14 years in the field of energy throughout the country. The company is headquartered in Calabria, in the industrial area of Zumpano close to Cosenza. The new head office building has been entirely designed and built by the Group companies and is highly energy efficient: A+ class, that is 4.00 kWh/sqm per year of energy performance achievable. Furthermore, the



building dissipates 70% less energy than a similar building complying with current regulations. Energy saving means not only cost reduction, but also 10 tons of CO2 avoided. For these reasons, the head office of Omnia Energia, in 2013, won an important European award like The most Sustainable Urban Building, between the best examples of green buildings in Europe.

Omnia Energia Group was created to provide its customers with solutions for the reduction of energy cost. Over the years the Group has developed a wide range of products and services for energy saving, becoming a complete supplier able to meet every costumer's need in a competent way.

Mainly, Omnia Energia sells electricity and natural gas to end users in the open market, systems to produce renewable energy, energy efficiency, Energy Efficient Buildings and Hardware and Software for the Energy Market. About the last point, Omnia Energia Group offers to business operators a wide range of high-tech and innovative solutions. In fact, the business units of the ITC area are: monitoring e automation; services for energy and IT; R&D; software for utilities.

Ultimately, Omnia Energia provides end-to-end Energy Management solutions for C&I sector companies and Smart Meter solutions for residential and small businesses. It offers customized solutions using its energy meters, smart gateways and the intelligent Omnia Cloud Platform to measure, monitor, analyze, control and automate the energy performance in real time.

- website: www.omniaenergia.it/en/
- ▶ e-mail: info@omniaenergia.it

OPEN KNOWLEDGE TECHNOLOGIES - OKT

Business Sector: ICT (Social Enterprise Content Management, Cyber Security)

OKT srl deals with the design and the implementation of innovative software products, integrating open source software solutions and employing unconventional software engineering methodologies and practices. These techniques are based on "early requirements" and "agile software development" for small to medium sized systems, and the approaches are based on planned models for complex and / or medium to large systems. During the last few years, OKT focused its research and development activities in the fields of Cloud Computing and Virtual Environments and applied the matured expertise in the context of Cyber Security solutions.



- website: www.okt-srl.com
- e-mail: info@okt-srl.com

PLATONET

Business Sector: ICT (e-Commerce, CMS, KMS, e-Gov, Mobile, IoT)

Platonet has the mission to provide a whole spectrum of expertise starting from the initial consulting to the implementation and rolling out of highly customized e-business solution for SME Enterprises.

Products and service include LMS development & management, e-business vendor platforms development & management, e-business modules (e.g. connectors to ERP or CRM), mobile apps (Android and iOS) development, social media integration development & management, social media marketing plans deployment.

- website: www.platonet.it
- e-mail: info@platonet.it

PRIMATECH

Business Sector: ICT (Cyber Security)

Primatech S.r.l. is a startup that aims to develop innovative products and services in the ICT Security field.

The company promotes employment of young people and professional training and it has established strong ties with the University of Calabria and the South CNR (National Council of Research).

The employees' average age is below 32 years old. The staff is a perfect combination between resources with a higher degree of seniority and junior resources, for which a well-structured training plan is foreseen.

The business strategy of Primatech S.r.l is based mainly on the development of borderline products and services.

The company has chosen to focus its research and development efforts in the identification of "unexplored spaces" of the new technologies and methods in ICT, with particular focus on the systems, networks and, more generally, of the information security.

The company, conscious of the complexity and far-sightedness of this objective, as well as the benefits that these innovations could lead in the international scenario, has established a network of partnerships and cooperations with technological and innovative clusters (Distretto Cyber Security of Cosenza, Distretto Domus, Università della Calabria, etc.) and it already has a partnership with an important system integrator that offers specific expertise in ICT and Telecommunications.

The value acquired from Primatech S.r.l. through the above collaborations supports its customers in the development of complex solutions, especially in a sector such as ICT, characterized by the



presence of different system integrators that operate on a large scale and hold the large part of demand of big business and of PA.

- ▶ website: www.primatechsecuriy.it
- e-mail: info@primatechsecurity.it

SENSYSCAL

Business Sector: ICT (Wireless Sensor Networks Solutions)

SenSysCal has the mission to develop innovative, 24/7 monitoring systems and services in both the smart-health and the building management domains. Specifically, SenSysCal offers products and services for (i) remote continuous, non-invasive patient monitoring and motor rehabilitation supported by wearable (wireless) motion sensors and (ii) remote fine-grained building monitoring and actuation supported by wireless low-energy sensors and actuators.

A proprietary cloud infrastructure assists the implementation of largescale and enterprise systems. SenSysCal innovative services and products are derived from academic research results in the distributed sensor-based systems domain.

- ▶ website: www.sensycal.it
- ▶ e-mail: contact@sensyscal.it

SIRIA - SERVIZI INTEGRATI E RICERCA PER L'AMBIENTE

Business Sector: Integrated Services for environmental protection.

SIRiA srl provides several integrated services for environmental protection: environmental and chemical monitoring of water resources, site characterization and remediation, chemical and biological analysis for environmental protection, design and development of ad-hoc brownfield recovering strategies, design of early-warning and monitoring systems for landslides, 2D and 3D slope stability analysis, chemical and physical methods for soils reinforcement and consolidation, seismic site response analysis, seismic microzonation analysis, soil-foundationsuperstructure analysis under static and dynamic loading, environmental risk assessment, development of new materials for energy and environment.

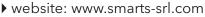


- ▶ website: www.siriasrl.it
- e-mail: info@siriasrl.it

SMARTS

Business Sector: ICT, Smart Communities

Smarts Srl, spin-off from the Mediterranean University of Reggio Calabria, was founded in July 2014 as an innovative start-up in the ICT field. Thanks to consolidated synergies with engineering laboratories and industrial partners, both at national and international level, Smarts promotes scientific research and technology transfer activities. The founding members are researchers and experts actively working in the engineering field, with skills covering aspects such as 4G network design, planning and optimization and R&D activities in emerging telecommunication systems. The goal of Smarts is to offer high level engineering consultancy for innovative solution design in the Smart Communities, i.e., Smart Telecommunication, Smart City, Smart Health, Smart Living, Smart Farm and Smart Transport.



• e-mail: info@smarts-srl.com

SPINTEL

Business Sector: ICT (Home and Building Automation Systems and Energy Management)

Spintel Srl deals with the design and implementation of home and building automation systems and remote control systems. In particular, the company develops technologically advanced hardware and software solutions that are able to bring intelligence to the environments where they are installed in terms of security and management of energy waste.

- website: www.spintel.it
- e-mail: info@spintel.it

TIFQLAB

Business Sector: Food Processes

TIFQLab is an analysis, experimentation and research center for food technologies and drinking water, which performs as a technicalscientific support in the evaluation of the hygienic-manufacturing risks of materials and processes and in the application of fitting solutions for the companies of the sector. TIFQLab promotes scientific collaboration between Universities and other public and private, national, European and international research bodies, focusing its own competences on



the hygienic and healthy aspects of materials in contact with food and drinking water and on technological processes.

- website: www.tifqlab.it
- ▶ e-mail: segreteria@tifqlab.it

Z LAB

Business Sector: Acoustics, Facility Engineering Services, RAMS & PTEC

Z Lab S.r.l. was founded in 2006 with the main mission to apply the aeronautic engineering knowledge and technologies to other traditionally less developed areas.

Z Lab company provides an answer to the customer's needs in the following areas: industrial acoustics; environmental acoustics; architectural acoustics; laboratory. The company strengths are:

- innovation and research through thermo-acoustic and vibration laboratory;
- referenced experiences through direct participation in complex projects with some of the major Italian industrial companies;
- dynamism and enthusiasm of a young and modern organization;
- full coverage of the Italian territory through its offices and distributed sites.

Z Lab is capable of supporting industries in every aspect regarding sound insulation, thanks to a long and proven experience in the field of air and railway acoustic research and other factors, such as advanced acoustics analysis, software advanced diagnostic tools, surrounding of the noise source.

website: www.zeta-lab.it

▶ e-mail: info@zeta-lab.it



E. PROJECT PROPOSALS SUBMITTED TO THE BIAT

Company	Title of the Project	
Artémat S.r.l.	- Beatrice - Web In Basket	
DLVSYSTEM S.R.L.	THT - Talent Hunter Technology	
E way Enterprise Business Solutions srl	eIMES 3D - IMaging Evolution System 3D	
Exeura S.r.l Spin-off dell'Università della Calabria	Fault Detection and Explanation through Big Data Analysis on Sensor Streams	
GiPStech Srl	Hybrid geomagnetic indoor positioning services	
Grunta srlss	illCare	
Primatech Srl	IoT Security	
SMARTS S.R.L.	- BeMyTester - Smart Agent	
Università "Mediterranea" di Reggio Calabria (Laboratorio accademico di coworking "Barbiana 2.0")	Smile4DYS: an app for supporting dyslexic kids and teens in their learning activities	
Università Mediterranea di Reggio Calabria	- Fine-Grained Access Control of Twitter Applications - An alternative to Blockchain using Twitter	





The Italian Trade Agency - ICE is the Government agency that supports the globalization of Italian firms, implementing the strategies of the Ministry of Economic Development.

The Italian Trade Agency - ICE helps to develop, facilitate and promote Italian economic and trade relations with foreign countries, focusing on the needs of SME's, their associations and partnerships.

The Italian Trade Agency - ICE sustains Italian firms in their internationalization processes, in the marketing of Italian goods and services while promoting the "Made In Italy' image around the world, and it is directly involved in attracting foreign direct investments. The Italian Trade Agency - ICE provides information, support and consultancy to Italian companies on foreign markets, promoting and fostering exports and cooperation in all areas - industry (consumer and capital goods), agricultural technology and agri-food, services, and training - with the aim of increasing and making more effective their presence on international markets.

The Italian Trade Agency - ICE works closely with the Italian Regions, the network of the Italian Chambers of Commerce, business organizations and other public and private entities.

The Italian Trade Agency - ICE headquarters is in Rome, with a large network of offices around the world and acts as "Trade Promotion Sections" of the Italian Embassies or Consulates.

The BIAT

Funded under the Cohesion Action Plan of the Economic Development Ministry, the BIAT - Innovation and High Technology Lab, is an initiative designed to enable the enterprises and research systems of Italy's socalled Convergence Regions - Campania, Calabria, Apulia and Sicily - to express their full potential for innovation and excellence. BIAT is part of the program of activities of the Export South Plan.

The event is organised by the Italian Trade Agency in collaboration with the Convergence Regional Governments.

BIAT aims to promote the placing on the market and/or the transfer of innovative products and services or high technology and intangible assets (patents in particular) by matching commercial and technology supply and demand between start ups, innovative SMEs, business networks, universities, technology parks and foreign counterparts. BIAT aims to put in place a systematic offering of industrial application opportunities from which all entrepreneurs can benefit.





ICE- Agenzia per la promozione all'estero e l'internazionalizzazione delle imprese italiane

www.ice.gov.it

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UFFICIO COORDINAMENTO PROMOZIONE DEL MADE IN ITALY PIANO EXPORT SUD

pianosud@ice.it www.ice.gov.it/export_sud/export_sud.htm

UFFICIO DI MILANO

Corso Magenta, 59 - 20/123 Milano milano@ice.it



